

## CAPE FEAR RIVER BASIN

02100500 DEEP RIVER AT RAMSEUR, NC

LOCATION.--Lat 35°43'34", long 79°39'20", Randolph County, Hydrologic Unit 03030003, on right bank 0.2 mi downstream of Main Street bridge in Ramseur, 0.5 mi downstream of mill dam, and 1.5 mi downstream of Sandy Creek.

DRAINAGE AREA.--349 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1922 to current year.

REVISED RECORDS.--WSP 1032: 1923-24, 1925(M), 1926, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M). WSP 1383: 1923(m), 1925, 1927, 1930, 1936. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 419.50 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Oak Hollow Reservoir (station 02098495), High Point Municipal Lake (station 02099096), and small power plant reservoirs. Prior to January 1963, diurnal fluctuation caused by power plant immediately upstream from station. Town of Asheboro diverted an average of 8.0 ft<sup>3</sup>/s from Yadkin River Basin for water supply and discharged an average of 6.4 ft<sup>3</sup>/s of treated effluent upstream from the station. Maximum discharge for period of record from rating curve extended above 18,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; gage height, 34.04 ft. Minimum discharge for period of record occurred frequently in 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1901 reached a stage of 28.75 ft, from floodmarks, 0.2 mi upstream; discharge, 30,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 23    | 29    | 29    | 28    | 125   | 84    | 248   | 46    | 94    | 20    | 28    | 4460  |
| 2     | 25    | 31    | 28    | 28    | 118   | 81    | 266   | 45    | 46    | 26    | 31    | 754   |
| 3     | 25    | 33    | 28    | 32    | 103   | 602   | 190   | 42    | 31    | 33    | 31    | 257   |
| 4     | 25    | 32    | 28    | 31    | 69    | 569   | 159   | 54    | 48    | 45    | 30    | 141   |
| 5     | 26    | 32    | 27    | 31    | 92    | 272   | 110   | 72    | 49    | 66    | 29    | 72    |
| 6     | 28    | 31    | 28    | 44    | 89    | 187   | 105   | 94    | 46    | 53    | 28    | 42    |
| 7     | 27    | 31    | 28    | 272   | 124   | 156   | 106   | 73    | 43    | 20    | 27    | 45    |
| 8     | 26    | 30    | 28    | 197   | 434   | 105   | 86    | 53    | 37    | 22    | 25    | 43    |
| 9     | 25    | 31    | 28    | 125   | 298   | 78    | 119   | 52    | 17    | 25    | 25    | 39    |
| 10    | 25    | 32    | 31    | 117   | 171   | 124   | 113   | 42    | 22    | 26    | 25    | 36    |
| 11    | 26    | 32    | 184   | 75    | 160   | 123   | 100   | 41    | 26    | 94    | 24    | 33    |
| 12    | 27    | 29    | 191   | 36    | 164   | 108   | 78    | 41    | 25    | 298   | 24    | 31    |
| 13    | 28    | 50    | 72    | 40    | 136   | 178   | 100   | 39    | 27    | 46    | 23    | 29    |
| 14    | 34    | 33    | 70    | 36    | 124   | 589   | 107   | 38    | 26    | 60    | 22    | 31    |
| 15    | 133   | 29    | 53    | 74    | 113   | 288   | 111   | 71    | 26    | 75    | 24    | 61    |
| 16    | 119   | 29    | 35    | 75    | 96    | 185   | 74    | 61    | 25    | 30    | 23    | 201   |
| 17    | 53    | 30    | 33    | 34    | 95    | 171   | 79    | 13    | 24    | 31    | 25    | 110   |
| 18    | 32    | 29    | 29    | 24    | 68    | 277   | 64    | 27    | 23    | 34    | 34    | 47    |
| 19    | 31    | 31    | 55    | 141   | 66    | 236   | 76    | 38    | 24    | 33    | 35    | 349   |
| 20    | 30    | 31    | 70    | 1920  | 78    | 196   | 75    | 49    | 26    | 34    | 32    | 151   |
| 21    | 28    | 32    | 44    | 460   | 108   | 223   | 73    | 40    | 25    | 32    | 29    | 51    |
| 22    | 25    | 32    | 41    | 323   | 99    | 376   | 69    | 34    | 25    | 33    | 29    | 65    |
| 23    | 14    | 31    | 35    | 2620  | 74    | 231   | 55    | 31    | 27    | 78    | 28    | 66    |
| 24    | 19    | 37    | 38    | 2250  | 50    | 181   | 57    | 31    | 28    | 93    | 29    | 61    |
| 25    | 23    | 41    | 36    | 822   | 47    | 161   | 56    | 33    | 27    | 56    | 29    | 26    |
| 26    | 26    | 45    | 37    | 546   | 100   | 140   | 55    | 32    | 27    | 301   | 29    | 32    |
| 27    | 27    | 69    | 38    | 327   | 88    | 339   | 52    | 31    | 65    | 283   | 30    | 83    |
| 28    | 26    | 64    | 37    | 203   | 47    | 377   | 51    | 29    | 509   | 118   | 41    | 149   |
| 29    | 25    | 28    | 36    | 177   | ---   | 217   | 51    | 28    | 158   | 77    | 50    | 67    |
| 30    | 23    | 29    | 35    | 140   | ---   | 174   | 48    | 31    | 75    | 17    | 60    | 18    |
| 31    | 26    | ---   | 32    | 127   | ---   | 148   | ---   | 102   | ---   | 21    | 246   | ---   |
| TOTAL | 1030  | 1043  | 1484  | 11355 | 3336  | 7176  | 2933  | 1413  | 1651  | 2180  | 1145  | 7550  |
| MEAN  | 33.23 | 34.77 | 47.87 | 366.3 | 119.1 | 231.5 | 97.77 | 45.58 | 55.03 | 70.32 | 36.94 | 251.7 |
| MAX   | 133   | 69    | 191   | 2620  | 434   | 602   | 266   | 102   | 509   | 301   | 246   | 4460  |
| MIN   | 14    | 28    | 27    | 24    | 47    | 78    | 48    | 13    | 17    | 17    | 22    | 18    |
| CFSM  | 0.10  | 0.10  | 0.14  | 1.05  | 0.34  | 0.66  | 0.28  | 0.13  | 0.16  | 0.20  | 0.11  | 0.72  |
| IN.   | 0.11  | 0.11  | 0.16  | 1.21  | 0.36  | 0.76  | 0.31  | 0.15  | 0.18  | 0.23  | 0.12  | 0.80  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2002, BY WATER YEAR (WY)

|      |       |       |       |       |       |       |       |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 204.7 | 210.4 | 336.0 | 552.1 | 648.7 | 640.5 | 488.9 | 286.4 | 209.2 | 216.7 | 200.9 | 240.8 |
| MAX  | 1193  | 1237  | 1050  | 1660  | 1642  | 1842  | 1440  | 944   | 978   | 1434  | 896   | 1934  |
| (WY) | 1991  | 1986  | 1933  | 1937  | 1979  | 1975  | 1936  | 1978  | 1982  | 1975  | 1939  | 1928  |
| MIN  | 8.69  | 14.1  | 39.1  | 40.8  | 119   | 144   | 97.8  | 45.6  | 48.1  | 36.5  | 32.4  | 17.7  |
| (WY) | 1942  | 1942  | 1934  | 1942  | 2002  | 1967  | 2002  | 2002  | 1933  | 1986  | 1956  | 1954  |

## 02100500 DEEP RIVER AT RAMSEUR, NC--Continued

| SUMMARY STATISTICS       | FOR 2001 CALENDAR YEAR | FOR 2002 WATER YEAR | WATER YEARS 1923 - 2002 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 54085                  | 42296               |                         |
| ANNUAL MEAN              | 148.2                  | 115.9               |                         |
| HIGHEST ANNUAL MEAN      |                        |                     | 351.3                   |
| LOWEST ANNUAL MEAN       |                        |                     | 665                     |
| HIGHEST DAILY MEAN       | 4020                   | Mar 30              | 1975                    |
| LOWEST DAILY MEAN        | 14                     | Oct 23              | 116                     |
| ANNUAL SEVEN-DAY MINIMUM | 23                     | Oct 22              | 2002                    |
| MAXIMUM PEAK FLOW        |                        | 4460                | 27800                   |
| MAXIMUM PEAK STAGE       |                        | Sep 1               | Sep 18 1945             |
| INSTANTANEOUS LOW FLOW   |                        | 13                  | 0.70                    |
| ANNUAL RUNOFF (CFSM)     | 0.42                   | May 17              | Nov 29 1941             |
| ANNUAL RUNOFF (INCHES)   | 5.76                   | 23                  | 3.6 Oct 19 1941         |
| 10 PERCENT EXCEEDS       | 249                    | Oct 22              | 43000* Sep 18 1945      |
| 50 PERCENT EXCEEDS       | 72                     | Sep 1               | 34.04* Sep 18 1945      |
| 90 PERCENT EXCEEDS       | 29                     | 11.68               | 0.40* May 27 1941       |
|                          |                        | 12                  | 1.01                    |
|                          |                        | May 17              | 13.68                   |
|                          |                        | 202                 | 678                     |
|                          |                        | 44                  | 148                     |
|                          |                        | 25                  | 36                      |

\* See REMARKS.

